

Subjective Usability Feedback from the Field over a Network

Leader: *Bruce Elgin, Operations System Training Group*
Telos Corporation @ Caltech Jet Propulsion Laboratory, 301-385
4800 Oak Grove Drive
Pasadena, CA 91109
Email: Bruce. G. Elgin@jpl.nasa.gov

KEYWORDS

Usability, Remote Evaluation, Network, User Feedback, User Motivation, Subjective Feedback

SUMMARY

How can good continuous feedback about the effectiveness of a computer-human interface be obtained from distributed users?

At the Jet Propulsion Laboratory, different parts of a **multimission** ground data system (which are maintained by different groups) are loosely integrated and customized by flight projects on their workstations to support their own mission operations organizations. Each project and team chooses the **pieces** it wants and is responsible for configuring them in its preferred way. As a result, users have many different configurations, effectively precluding the development of a **centralized** help facility and limiting the practicality of many usability techniques.

Anecdotal **evidence** suggests that there are significant usability problems with the interfaces that **people** and teams configure for **themselves**. It is typical for a flight project to pay experienced ground system personnel to support them on a daily basis, creating and revising scripts, graphical user **interfaces**, and things that break. This leads to spur-of-the-moment patches and workarounds made with scripts that are not well documented nor **well** managed, and with **little** consideration of long-term usability issues. It is unlikely that upcoming low-cost projects will be able to afford this service. If there were an effective way to get

feedback about similar problems people have across different flight projects, changes could be requested in the delivered system and default **configurations** which would **reduce** the need for this **expensive** hand-holding. While there is a process in place for reporting and tracking system "failures", there is no good way to get a consistent record of **usability** and operability concerns.

Because our users are **geographically** distributed, we would like to obtain information from them over the network about their operational concerns. Automated measures of their activity are of limited use because we are not experts in their tasks. **We** would like their candid assessment of what they feel contributes to and what they feel **reduces** their productivity in their own context.

What are tools and techniques that **can** be used to motivate users to communicate useful subjective **usability** information to us over the network, with a minimum effort on their **part**?

ISSUES

What kinds of useful subjective usability feedback can be obtained over a network?

What approaches and techniques can be used to:

- **secure** the willingness and confidence of users to communicate usability problems and concerns,
- assist them in recognizing useful feedback,
- assist them in communicating **feedback** with minimum **effort**?

STRUCTURE

The **structure** of this SIG is informal discussion moderated by the session leader. Additional issues or concerns in the area of remote usability evaluation are **welcome**. The first five minutes of the session will be used to **create** and prioritize a list of specific topics for discussion. Copies of an audiotape of the session or meeting notes will be available to SIG participants after the **conference**.